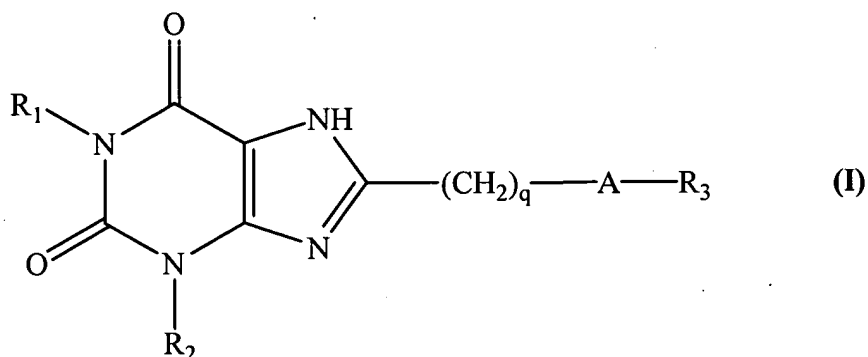


Amendments to the Claims:

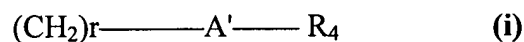
1. (Currently amended) A compound of formula (I):



wherein:

A is a 5- or 6-membered ~~aromatic or~~ heteroaromatic ring containing ~~[[0]]~~ 1 to 4 heteroatoms selected from the group consisting of N, O, and S;

R₂ is of the formula (i):



wherein:

A' is a ~~5- or~~ 6-membered aromatic or heteroaromatic ring containing 0 to 4 heteroatoms selected from the group consisting of N, O, and S;

r is an integer ranging from 1 to 20;

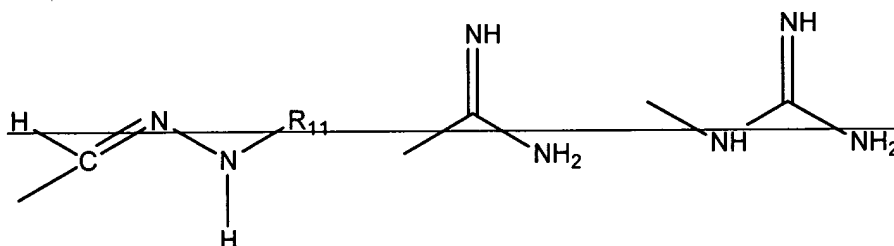
R₄ is selected from the group consisting of H; NH₂; (CH₂)_sOH, wherein s is an integer ranging from 1 to 8; COOH; R₁₄COOH, wherein R₁₄ is an ~~alkyl~~ alkylene or alkylidene group having 1 to 8 carbon atoms~~[[,]]~~; halo, NHR₈, NR₈R₉, NHCOR₈, NR₈COR₉, SO₃H and PO₃H₂;

R₃ is selected from the group consisting of H, NH₂, R₁₅COOH, wherein R₁₅ is an ~~alkyl~~ alkylene or alkylidene group having 1 to 8 carbon atoms, and (CH₂)_tOH, wherein t is

an integer ranging from 1 to 8; halo, NHR_8 , NR_8R_9 , NHCOR_8 , NR_8COR_9 , SO_3H and PO_3H_2 ;

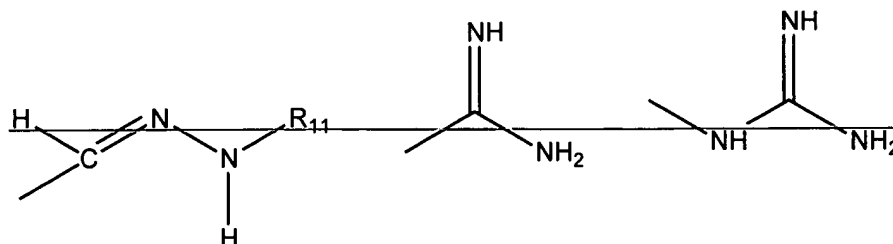
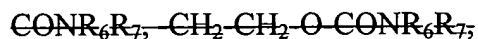
q is an integer ranging from 1 to 8; and

[[or]] R_1 or R_2 is a C_1 - C_8 alkanyl group, C_2 - C_8 -alkenyl- or $[[\text{C}_2\text{-C}_8]]$ C_2 - C_8 -alkynyl- group which is optionally substituted by -CN, $-\text{CH}_2\text{NR}_6\text{R}_7\text{OH}$, $-\text{OR}_8$, $-\text{NR}_6\text{R}_7$, $-\text{NHCOR}_8$, $\text{NHCONR}_6\text{R}_7$, halogen, $-\text{OCOR}_8$, $-\text{OCH}_2\text{COOH}$, $-\text{OCH}_2\text{COOR}_8$, $-\text{SO}_2\text{R}_5$, $-\text{S-R}_5$, NHCONH-phenyl , $-\text{OCH}_2\text{-CONR}_6\text{R}_7$, $-\text{OCH}_2\text{CH}_2\text{OH}$, $-\text{SO}_2\text{-CH}_2\text{-CH}_2\text{-O-COR}_8$, $-\text{OCH}_2\text{-CH}_2\text{-NR}_6\text{R}_7$, $-\text{SO}_2\text{-CH}_2\text{-CH}_2\text{-OH}$, $-\text{CONHSO}_2\text{R}_8$, $-\text{CH}_2\text{CONHSO}_2\text{R}_8$, $-\text{OCH}_2\text{CH}_2\text{OR}_8$, $-\text{COOH}$, $-\text{COOR}_8$, $-\text{CONR}_6\text{R}_7$, $-\text{CHO}$, $-\text{SR}_8$, $-\text{SOR}_8$, $-\text{SO}_2\text{R}_8$, $-\text{SO}_3\text{H}$, $-\text{PO}_3\text{H}_2$, $-\text{SO}_2\text{NR}_6\text{R}_7$, $-\text{OCH}_2\text{-CH}_2\text{OCOR}_8$, $-\text{CH=NOH}$, $-\text{CH=NOR}_8$, $-\text{COR}_9$, $-\text{CH(OH)R}_9$, $-\text{CH(OR}_8)_2$, $-\text{CH=CH-R}_{10}$, $-\text{OCONR}_6\text{R}_7$,



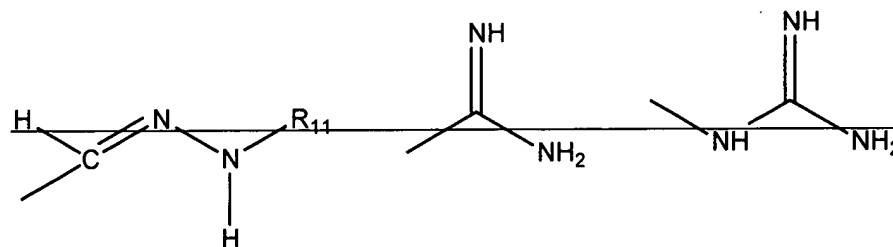
or by 1,3-dioxolane or 1,3-dioxane which is optionally mono- or polysubstituted by methyl; or

denotes phenyl- C_1 - C_6 -alkylene, phenyl- C_2 - C_6 -alkenylene or phenyl- C_2 - C_6 -alkynylene, in which the phenyl ring is optionally substituted, either directly or via a C_1 - C_4 -alkylene group, with one or more of the following groups: C_1 - C_3 -alkyl, CN, $\text{CH}_2\text{NR}_6\text{R}_7$, NO_2 , OH, OR_8 , $\text{CH}_2\text{NH-SO}_2\text{R}_8$, NHCOR_8 , $\text{NHCONR}_6\text{R}_7$, halogen, OCOR_8 , OCH_2OOH , $\text{OCH}_2\text{COOR}_8$, CH_2OCOR_8 , SO_2R_5 , $\text{OCH}_2\text{-CONR}_6\text{R}_7$, $\text{OCH}_2\text{CH}_2\text{OH}$, $\text{OCH}_2\text{-CH}_2\text{-NR}_6\text{R}_7$, $\text{CONHSO}_2\text{R}_8$, $\text{OCH}_2\text{CH}_2\text{OR}_8$, COOH , COOR_8 , CF_3 , cyclopropyl, CONR_6R_7 , CH_2OH , CH_2OR_8 , CHO , SR_8 , SOR_8 , SO_2R_8 , SO_3H , PO_3H_2 , $\text{SO}_2\text{NR}_6\text{R}_7$, $\text{OCH}_2\text{-CH}_2\text{OCOR}_8$, CH=NOH , CH=NOR_8 , COR_9 , CH(OH)R_9 , $\text{CH(OR}_8)_2$, NHCOOR_8 , $\text{CH}_2\text{CONHSO}_2\text{R}_8$, CH=CH-R_{10} , OCONR_6R_7 , $\text{CH}_2\text{-O-}$



or by 1,3-dioxolane or 1,3-dioxane which is optionally mono- or polysubstituted by methyl; or

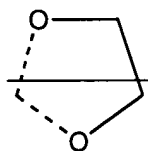
denotes ~~C₃-C₇-cycloalkyl-C₁-C₆-alkylene, C₃-C₇-cycloalkyl-C₂-C₆-alkenylene, C₃-C₇-cycloalkyl-C₂-C₆-alkynylene, in which the cycloalkyl group may optionally be substituted, either directly or via a C₁₋₄-alkylene group, by CN, CH₂NR₆R₇, =O, OH, OR₈, NR₆R₇, NHCOR₈, NHCONR₆R₇, halogen, OCOR₈, OCH₂COOH, OCH₂COOR₈, CH₂OCOR₈, SO₂R₅, OCH₂CONR₆R₇, OCH₂CH₂OH, OCH₂CH₂NR₆R₇, OCH₂CH₂OR₈, COOH, COOR₈, CONR₆R₇, CH₂OH, CH₂OR₈, CHO, SR₈, SOR₈, SO₂R₈, SO₃H, PO₃H₂, SO₂NR₆R₇, OCH₂CH₂OCOR₈, CH=NOH, CH=NOR₈, COR₉, CH(OH)R₉, CONHSO₂R₈, CH(OR₈)₂, NHCOOR₈, CH=CH R₁₀, OCONR₆R₇, CH₂O CONR₆R₇, CH₂CH₂O CONR₆R₇~~



or by 1,3-dioxolane or 1,3-dioxane which is optionally mono- or polysubstituted by methyl; or

denotes a group of the formula ~~A-C₁-C₆-alkylene, A-CONH-C₁-C₆-alkylene, A-CONH-C₂-C₆-alkenylene, A-CONH-C₂-C₆-alkynylene, A-NH-CO-C₁-C₆-alkylene, A-~~

~~NH-CO-C₂-C₆-alkenylene, A-NH-CO-C₂-C₆-alkynylene, A-C₂-C₆-alkenylene or A-C₂-C₆-alkynylene, wherein A is a C- or N-linked 5- or 6-membered heterocyclic ring, 5- or 6-membered aromatic ring, or 5- or 6-membered heteroaromatic ring which contains nitrogen, oxygen or sulphur as heteroatoms and may optionally be mono- or polysubstituted, by C₁-C₄-alkyl, halogen, OR₈, CN, NO₂, NH₂, CH₂NR₆R₇, OH, =O, a ketal, COOH, SO₃H, PO₃H₂, COOR₈, CONR₆R₇, COR₉, SO₂-R₈, CONR₆R₇ or~~



R₅ denotes is C₁-C₄-alkyl, optionally substituted by OH, OCOR₈, NH₂, NR₆R₇ or NHCOR₈,

R₆, R₇, and R₈ are each independently hydrogen, an optionally substituted C₃₋₆-cycloalkyl group, a branched or unbranched alkyl-, alkenyl- or alkynyl group having up to 10 carbon atoms, ~~preferably a C₁-C₄-alkyl group,~~ which may optionally be substituted by hydroxy, phenyl, substituted phenyl, amino, ~~substituted amino~~ substituted with[[,]] C₁ to C₈ alkyl, or it denotes --(CH₂)_m-NHCOOR₈ wherein m=1, 2, 3 or 4;

~~R₇ denotes hydrogen, an optionally substituted C₃₋₆-cycloalkyl group, a branched or unbranched alkyl-, alkenyl- or alkynyl group having up to 10 carbon atoms, which may optionally be substituted by hydroxy, phenyl, substituted phenyl, amino, substituted amino, C₁ to C₈, or it denotes --(CH₂)_m-NHCOOR₈ wherein m=1, 2, 3 or 4; or R₆ and R₇ together with the nitrogen atom form a saturated or unsaturated 5- or 6-membered ring which may contain as heteroatoms nitrogen, oxygen or sulphur, while the heterocyclic ring may be substituted by a branched or unbranched C₁₋₄-alkyl group, or may carry one of the following groups: (CH₂)_n, NH₂, =O, a ketal preferably O-CH₂-CH₂-O-, (CH₂)_n, NH-C₁-C₄-alkyl, (CH₂)_n, N(C₁-C₈-alkyl), (CH₂)_n, NHCOOR₈, (n=2, 3, 4), halogen, OR₈, CN, NO₂, NH₂, CH₂NR₆R₇, OH, COOH, SO₃H, PO₃H₂, COOR₈, CONR₆R₇, SO₂R₈;~~

R₈ denotes hydrogen, C₁-C₈-alkyl or C₂-C₈-alkenyl or C₂-C₈-alkynyl optionally

~~substituted with CO₂H, a benzyl or phenyl group, which is optionally mono- or polysubstituted by OCH₃;~~

R₉ ~~denotes~~ is C₁-C₈-alkyl or C₂-C₈-alkenyl or C₂-C₈-alkynyl optionally substituted with CO₂H, optionally substituted phenyl, optionally substituted benzyl, C₃-C₆-cycloalkyl, and

R₁₀ ~~denotes~~ is -COOR₈, -CH₂OR₈, -CONR₆R₇, hydrogen, C₁-C₃-alkyl, optionally substituted phenyl, --CH₂NR₆R₇;

and pharmaceutically acceptable salts, hydrates and prodrugs thereof.

2. (Original) The compound of claim 1, wherein at least one of R₃ and R₄ is independently selected from the group consisting of SO₃H and PO₃H₂.

3. (Currently amended) The compound of claim 1, wherein R₁ [[or R₂,]] is a C₁-C₈ alkanyl group, C₂-C₈-alkenyl group or C₂-C₈ alkynyl group which is optionally substituted by NR₆R₇, -SO₃H, or -PO₃H₂.

4. (Currently amended) The compound of claim 1, wherein A is ~~phenyl~~ selected from the group selected from the group consisting of pyridyl, thiophenyl, thiazolyl, and tetrazolyl.

5. (Original) The compound of claim 1, wherein A' is phenyl.

6. (Currently amended) The compound of claim 1, wherein:

R₁ is a C₁-C₈ alkanyl group, C₂-C₈-alkenyl group or C₂-C₈ alkynyl group which is optionally substituted by NR₆R₇ or -SO₃H;

A is ~~phenyl~~ selected from the group selected from the group consisting of pyridyl, thiophenyl, thiazolyl, and tetrazolyl; and

A' is phenyl.

7. (Original) The compound of claim 6, wherein at least one of R₃ and R₄ is independently selected from the group consisting of SO₃H and PO₃H₂.

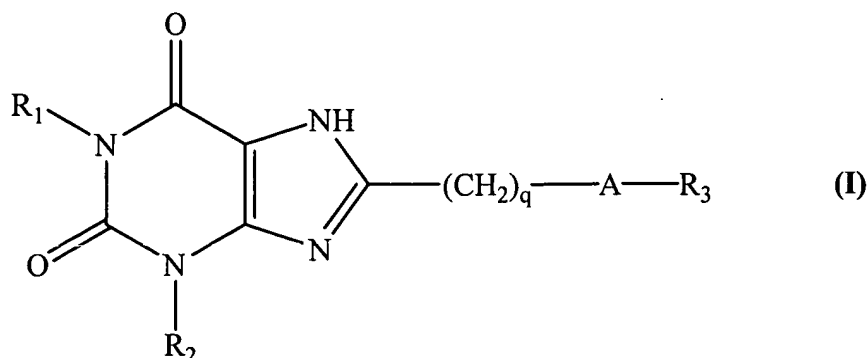
8. (Currently amended) The compound of claim 1, wherein said compound is selected from the group consisting of:

~~3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-propylxanthine;~~
3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-[(3-pyridyl)methyl]xanthine;
3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-[(4-thiazolyl)methyl]xanthine;
~~3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-(4-sulfonoxybenzyl)xanthine;~~
~~3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(3-methoxypropyl)xanthine;~~
~~3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(3-dimethylamino)propylxanthine;~~
~~3-[2-[4-(6-Aminohexanoyl)aminophenyl]ethyl]-8-benzyl-1-propylxanthine;~~
~~8-Benzyl-1-propyl-3-[4-(4-sulfonoxyphenyl)butyl]xanthine;~~
~~8-Benzyl-1-propyl-3-[2-(4-sulfonoxyphenyl)ethyl]xanthine;~~
~~3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(3-sulfonoxypropyl)xanthine;~~
3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-[(thiophen-2-yl)methyl]xanthine;
3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-[(1H-tetrazol-5-yl)methyl]xanthine;
and pharmaceutically acceptable salts, hydrates and prodrugs thereof.

9-11. (Canceled)

12. (Original) A composition comprising a compound of claim 1 in a pharmaceutically acceptable carrier.

13. (New) A compound of formula (I):



wherein:

A is a 5- or 6-membered aromatic ring;

R₂ is of the formula (i):



wherein:

A' is a 6-membered aromatic ring or a heteroaromatic ring containing 0 to 4 heteroatoms selected from the group consisting of N, O, and S;

r is an integer ranging from 1 to 20;

R₄ is selected from the group consisting of NH₂, halo, NHR₈, NR₈R₉, NHCOR₈, NR₈COR₉, COOH, SO₃H and PO₃H₂;

R₃ is selected from the group consisting of H, NH₂, R₁₅COOH, wherein R₁₅ is an alkylene or alkylidene group having 1 to 8 carbon atoms, and (CH₂)_tOH, wherein t is an integer ranging from 1 to 8; halo, NHR₈, NR₈R₉, NHCOR₈, NR₈COR₉, SO₃H and PO₃H₂;

q is an integer ranging from 1 to 8; and

R₁ is a C₁-C₈ alkanyl- group, C₂-C₈-alkenyl-, or C₂-C₈-alkynyl- group which is optionally substituted by -CN, -CH₂NR₆R₇OH, -OR₈, -NR₆R₇, -NHCOR₈, -NHCONR₆R₇, halogen, -OCOR₈, -OCH₂COOH, -OCH₂COOR₈, -SO₂R₅, -S-R₅, -OCH₂-CONR₆R₇, -OCH₂CH₂OH, -SO₂-CH₂-CH₂-O-COR₈, -OCH₂-CH₂-NR₆R₇, -SO₂-CH₂-CH₂-OH, -CONHSO₂R₈, -CH₂CONHSO₂R₈, -OCH₂CH₂OR₈, -COOH, -COOR₈, -CONR₆R₇, -CHO, -SR₈, -SOR₈, -SO₂R₈, -SO₃H, -PO₃H₂, -SO₂NR₆R₇, -OCH₂-CH₂OCOR₈, -CH=NOH, -CH=NOR₈, -COR₉, -CH(OH)R₉, -CH(OR₈)₂, -CH=CH-R₁₀, -OCONR₆R₇,

R_5 is C_1 - C_4 -alkyl, optionally substituted by OH, $OCOR_8$, NH_2 , NR_6R_7 or $NHCOR_8$,

$R_6 - R_8$ are each independently hydrogen, an optionally substituted C_{3-6} -cycloalkyl group, a branched or unbranched alkyl-, alkenyl- or alkynyl group having up to 10 carbon atoms, which may optionally be substituted by hydroxy, phenyl, substituted phenyl, amino, amino substituted with C_1 - C_8 alkyl, or is $-(CH_2)_m-NHCOOR_8$ wherein $m=1, 2, 3$ or 4 ;

R_9 is C_1 - C_8 -alkyl or C_2 - C_8 -alkenyl or C_2 - C_8 -alkynyl optionally substituted with CO_2H , optionally substituted phenyl, optionally substituted benzyl, C_3 - C_6 -cycloalkyl, and

R_{10} is $-COOR_8$, $-CH_2OR_8$, $-CONR_6R_7$, hydrogen, C_1 - C_3 -alkyl, optionally substituted phenyl, $-CH_2NR_6R_7$;

and pharmaceutically acceptable salts, hydrates, and prodrugs thereof.

14. (New) The compound of claim 13, wherein A is phenyl.

15. (New) The compound of claim 13, wherein A' is phenyl.

16. (New) The compound of claim 13, wherein:

A is phenyl;

A' is phenyl;

r is 2;

R_4 is selected from the group consisting of NH_2 , $COOH$, $NHCOR_8$, and SO_3H ;

R_3 is selected from the group consisting of H, NH_2 , halo, SO_3H , and $NHCOR_8$;

q is 1; and

R_1 is a C_1 - C_8 alkanyl group optionally substituted by $-OR_8$, $-NR_6R_7$, or $-SO_3H$.

17. (New) The compound of claim 13, wherein said compound is selected from the group consisting of:

3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-propylxanthine;
3-[2-(4-Aminophenyl)ethyl]-1-propyl-8-(4-sulfonoxybenzyl)xanthine;
3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(3-methoxypropyl)xanthine;
3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(3-dimethylamino)propylxanthine;
3-[2-[4-(6-Aminohexanoyl)aminophenyl]ethyl]-8-benzyl-1-propylxanthine;
8-Benzyl-1-propyl-3-[4-(4-sulfonoxyphenyl)butyl]xanthine;
8-Benzyl-1-propyl-3-[2-(4-sulfonoxyphenyl)ethyl]xanthine;
3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(3-sulfonoxypropyl)xanthine;
3-[2-(4-Aminophenyl)ethyl]-8-(4-fluorobenzyl)-1-propylxanthine;
8-(2-Acetaminobenzyl)-3-[2-(4-aminophenyl)ethyl]-1-propylxanthine;
8-(2-Aminobenzyl)-3-(2-phenylethyl)-1-propylxanthine;
8-Benzyl-3-[2-(3-carboxyphenyl)ethyl]-1-propylxanthine;
3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(8-sulfonooctyl)xanthine;
3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(5-sulfonoxypentyl)xanthine;
3-[2-(4-Aminophenyl)ethyl]-8-benzyl-1-(5-sulfonoxypentyl)xanthine; and
pharmaceutically acceptable salts, hydrates and prodrugs thereof.

18. (New) A composition comprising a compound of claim 13 in a pharmaceutically acceptable carrier.